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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/526,899	09/21/2005	Andre Delacourte	032475-032	7830	
21839 7	590 08/22/2006		EXAM	INER	
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404			WANG, CE	WANG, CHANG YU	
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER	
			1649		

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/526,899	DELACOURTE ET AL.			
Office Action Summary	Examiner	Art Unit			
	Chang-Yu Wang	1649			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N.  nely filed  the mailing date of this communication.  D (35 U.S.C. § 133).			
Status	•				
Responsive to communication(s) filed on <i>Nov</i> 1      This action is <b>FINAL</b> . 2b) ☐ This      Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ⊠ Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) 1-22 are subject to restriction and/or expressions.	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				

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## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- Group I, claim(s) 1-7, drawn to markers of the neurodegenerative process.
- Group II, claim(s) 8-15. 19, drawn to a method of detection/diagnosis of the neurodegenerative process in vitro.
- Group III, claim(s) 16, drawn to an animal/cell model that expresses an ATP synthase a chain with signal defect or post-translational modification.
- Group IV, claim(s) 17, drawn to a method of pharmacological screening and therapeutic tests.
- Group V, Claim(s) 18, drawn to a method of establishing/validating the animal/cell model.
- Group VI, Claim(s) 20-22, drawn to antibodies and a diagnostic kit comprising the antibodies.
- 2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

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3. The 1<sup>st</sup> claimed invention is drawn to a technical feature of markers for the neurodegenerative process comprising the ATP synthase  $\alpha$  chain. Complex V,  $F_1F_0$  ATP synthase is known in the art. As found in IDS cited by Applicant, the Invention of the Group I was found to have no special technical feature that defined the contribution over the prior art of Schagger et al. Eur. J. biochem. 1995. 227: 916-921. Schagger et al. teach that  $F_1F_0$  ATP synthase (complex V) is deficient in Alzheimer's disease. The  $F_1F_0$  ATP synthase comprising ATP synthase  $\alpha$  chain, which meets the limitation recited in claim 1. Since the 1<sup>st</sup> claimed invention has no special technical feature, it cannot share a special technical feature with the other claimed inventions. Thus, Applicant's inventions have a single inventive concept and so lack unity of invention.

In addition, Group I is drawn to a technical feature of markers of the neurodegenerative process. Group II is drawn to a technical feature of a method of detection/diagnosis of the neurodegenerative process in vitro, which does not has a corresponding special technical feature in common with the rest of Groups.

Group III is drawn to a technical feature of an animal/cell model that expresses an ATP synthase a chain with signal defect or post-translational modification, which does not share a corresponding technical feature with the rest of Groups.

Group IV is drawn to a technical feature of a method of pharmacological screening and therapeutic tests, which does not have a corresponding special technical feature in common with the rest of Groups.

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Group V is drawn to a technical feature of a method of establishing/validating the animal/cell model, which does not share a common corresponding technical feature with the rest of Groups.

Group VI is drawn to a technical feature of antibodies and a diagnostic kit comprising the antibodies, which does not share a common corresponding technical feature with the rest of Groups.

- 4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143). In order to be fully responsive, Applicant is required to elect a single group from designated groups I-VI as set forth above to which the claims will be restricted, even though the requirement is traversed. The subject matter for examination will be restricted to the extent of the subject matter of the elected group.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 6. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (571) 272-1600.

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Papers relating to this application may be submitted to Technology Center 1600, Group 1649 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chang-Yu Wang, Ph.D. whose telephone number is (571) 272-4521. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, Ph.D., can be reached at (571) 272-0867.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CYW August 18, 2006

SUPERVISORY PATENT EXAMINER